

Listing of the Claims:

The following is a complete listing of all the claims in the application, with an indication of the status of each:

- 1 1 (Original). A wavelength division multiplexing transmission system in which a plurality of remote apparatuses are connected to a station apparatus and communication is performed among said remote apparatuses and the station apparatus, wherein each of said remote apparatuses comprises wavelength determining means that determines an available wavelength on the basis of an optical signal received from said station apparatus.
- 1 2 (Currently Amended). The wavelength division multiplexing transmission system according to claim 1, wherein said wavelength determining means determines the wavelength of an unreceived optical signal among the wavelength classification used with said transmission system as the available wavelength and sets the wavelength as a transmission and reception wavelength to be used in said remote apparatus.
- 1 3 (Original). The wavelength division multiplexing transmission system according to claim 1, wherein said wavelength determining means determines the wavelength of a received optical signal as the available wavelength and sets the wavelength as a transmission and reception wavelength to be used in said remote apparatus.
- 1 4 (Original). The wavelength division multiplexing transmission system according to claim 1, wherein said station apparatus comprises optical output control means that determines a wavelength to be used, on the basis of an optical signal received from said remote apparatus.

1 5 (Currently Amended). The wavelength division multiplexing
2 transmission system according to claim 1, wherein said station apparatus
3 prevents an optical signal having the same wavelength as an unreceived
4 wavelength among the wavelength classification used with said
5 transmission system from being outputted and outputting an optical signal
6 having the same wavelength as a received wavelength.

1 6 (Currently Amended). The wavelength division multiplexing
2 transmission system according to claim 1, wherein said wavelength
3 determining means comprises:

4 wavelength filtering means that sequentially separates optical
5 signals from an optical signal including a plurality of wavelengths;
6 optical receiving means that outputs a reception status signal
7 indicating whether or not said separated optical signal is being received;
8 wavelength control means that determines an unused wavelength
9 among the wavelength classification used with said transmission system on
10 the basis of said reception status signal, sets said unused wavelength as a
11 transmission and reception signal, and outputs a wavelength control signal
12 for setting said wavelength; and
13 optical transmitting means whose output wavelength is adjusted to
14 be said unused wavelength in response to said wavelength control signal.

1 7 (Original). The wavelength division multiplexing transmission system
2 according to claim 1, wherein said station apparatus comprises:

3 wavelength demultiplexing means that demultiplexes the
4 wavelength of a received optical signal;
5 optical receiving means that receives an optical signal
6 demultiplexed by said wavelength demultiplexing means;
7 optical output control means that determines, as a transmission
8 wavelength, an optical signal having the same wavelength as that of an
9 optical signal received by said optical receiving means;
10 optical transmitting means that transmits an optical signal having

11 the transmission wavelength determined by said optical output control
12 means; and

13 wavelength multiplexing means that multiplexes the wavelength of
14 the optical signal transmitted by said optical transmitting means.

1 8 (Original). The wavelength division multiplexing transmission system
2 according to claim 1, wherein each of said remote apparatuses and said
3 station apparatus are connected with each other through optical branching
4 and coupling means.

1 9 (Original). The wavelength division multiplexing transmission system
2 according to claim 8, wherein said optical branching and coupling means is
3 an optical coupler.

1 10 (Original). The wavelength division multiplexing transmission system
2 according to claim 8, wherein said optical branching and coupling means is
3 wavelength demultiplexing and multiplexing means.

1 11 (Original). The wavelength division multiplexing transmission system
2 according to claim 1, wherein said plurality of remote apparatuses and said
3 station apparatus are connected in a star topology.

1 12 (Original). The wavelength division multiplexing transmission system
2 according to claim 1, wherein said plurality of remote apparatuses and said
3 station apparatus are connected in a tree topology.

1 13 (Original). A remote apparatus in a wavelength division multiplexing
2 transmission system in which a plurality of remote apparatuses are
3 connected to a station apparatus and communication is performed among
4 said remote apparatuses and the station apparatus, said remote apparatus
5 comprising wavelength determining means that determines wavelength
6 determining means that determines an available wavelength on the basis of

7 an optical signal received from said station apparatus.

1 14 (Currently Amended). The remote apparatus according to claim 13,
2 wherein said wavelength determining means determines the wavelength of
3 an unreceived optical signal among the wavelength classification used with
4 said transmission system as the available wavelength and sets the
5 wavelength as a transmission and reception wavelength.

1 15 (Original). The remote apparatus according to claim 13, wherein said
2 wavelength determining means determines the wavelength of a received
3 optical signal as the available wavelength and sets the wavelength as a
4 transmission and reception wavelength.

1 16 (Currently Amended). The remote apparatus according to claim 13,
2 wherein said wavelength determining means comprises:

3 wavelength separating means that sequentially separates optical
4 signals from an optical signal including a plurality of wavelengths;
5 optical receiving means that outputs a reception status signal
6 indicating whether or not said separated optical signal is being received;
7 wavelength control means that determines an unused wavelength
8 among the wavelength classification used with said transmission system on
9 the basis of said reception status signal, sets said unused wavelength as a
10 transmission and reception signal, and outputs a wavelength control signal
11 for setting said wavelength; and

12 optical transmitting means whose output wavelength is adjusted to
13 be said unused wavelength in response to said wavelength control signal.

1 17 (Original). A station apparatus in a wavelength division multiplexing
2 transmission system in which a plurality of remote apparatuses are
3 connected to the station apparatus and communication is performed among
4 said remote apparatuses and the station apparatus, said station apparatus
5 comprising optical output control means that determines a wavelength to

6 be used, on the basis of an optical signal received from said remote
7 apparatus.

1 18 (Currently Amended). The station apparatus according to claim 17,
2 wherein said station apparatus prevents an optical signal having the same
3 wavelength as an unreceived wavelength among the wavelength
4 classification used with said transmission system from being outputted and
5 outputting and optical signal having the same wavelength as a received
6 wavelength.

1 19 (Original). The station apparatus according to claim 17, comprising:

2 wavelength demultiplexing means that demultiplexes the
3 wavelength of a received optical signal;

4 optical receiving means that receives an optical signal
5 demultiplexed by said wavelength demultiplexing means;

6 optical output control means that determines, as a transmission
7 wavelength, an optical signal having the same wavelength as that of an
8 optical signal received by said optical receiving means;

9 optical transmitting means that transmits an optical signal having
10 the transmission wavelength determined by said optical output control
11 means; and

12 wavelength multiplexing means that multiplexes the wavelength of
13 the optical signal transmitted by said optical transmitting means.

1 20 (Original). A method for adding a remote apparatus to a wavelength
2 division multiplexing transmission system in which a plurality of remote
3 apparatuses are connected to the station apparatus and communication is
4 performed among said remote apparatuses and the station apparatus,
5 wherein an available wavelength is determined on the basis of an optical
6 signal received at a remote apparatus to be added and the wavelength is set
7 as a transmission and reception wavelength to be used in said remote
8 apparatus to be added.